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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,475	03/09/2004	Martin Debreczeny	TYHC:0147/FLE (P0397R)	3301
52144	7590	12/07/2006	EXAMINER	
FLETCHER YODER (TYCO INTERNATIONAL, LTD.) P.O. BOX 692289 HOUSTON, TX 77269-2289			LIN, JACK	
			ART UNIT	PAPER NUMBER
			3768	

DATE MAILED: 12/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/797,475

Applicant(s)

DEBRECZENY ET AL.

Examiner

Jack Lin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25 is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-11, 14-21 and 24 is/are rejected.
- 7) ☒ Claim(s) 5-7, 12, 13, 22 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 10/23/2006.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

1. This action is in response to applicant's amendments filed on October 23, 2006.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Information Disclosure Statement***

3. The information disclosure statement (IDS) submitted on October 23, 2006 is acknowledged. The references listed therein have been considered.

#### ***Claim Rejections - 35 USC § 102***

4. Claims 1-4, 8-11, 14, 20-21, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Diab et al. '850 (US Patent 6,157,850). Diab et al. '850 discloses the same invention including a method and apparatus for measuring a physiological parameter.

Regarding claims 1-4 and 8, Diab et al. '850 discloses obtaining a first and second signal that includes a signal portion corresponding with motion-related events and with arterial pulsation events (column 10, lines 17-38) and combining the two signals to generate a combined signal where the signal portion corresponding with motion-related events is smaller than that present in the first and second signal (column 10, lines 39-53 and figure 4b). Diab et al. '850 discloses using a first wavelength of 910 nm and a second wavelength of 660 nm (column 23, line 23).

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Regarding claims 9 and 10, Diab et al. '850 discloses applying a multiplier (column 10, lines 39-53 and figure 4b) wherein the multiplier is a function of the ratio of absorption by hemoglobin (column 54, lines 51-62).

Regarding claim 11, Diab et al. '850 discloses the physiological parameter is a pulse rate (column 36, lines 38-41).

Regarding claim 14, Diab et al. '850 discloses means for obtaining a first and second signal (column 35, lines 8-16) and means for combining the first and second signal (column 36, lines 17-41).

Regarding claims 20 and 21, Diab et al. '850 discloses means for applying a multiplier and a processing device configured to combine the first and second signals (column 10, lines 39-53 and figure 4b).

Regarding claim 24, Diab et al. '850 discloses the physiological parameter is a pulse rate (column 36, lines 38-41).

#### ***Claim Rejections - 35 USC § 103***

5. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Diab et al. '850 as applied to claim 14 above, and further in view of Jöbsis. Diab et al. '850 discloses the invention substantially as claimed including an apparatus for measuring a physiological parameter. Diab et al. '850 does not show the means for obtaining a first signal comprise light emission and light detection optics. However, Jöbsis discloses a spectrophotometric apparatus that uses light emission and light detection optics (column 19, line 57 – column 20, line 11 and figure 7) as a means for directing light to a tissue location and means for receiving light from the

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tissue location. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus of Diab et al. '850 with light emission and light detection optics as taught by Jöbsis since Diab et al. '850 requires means for directing light to a tissue and means for receiving light from the tissue and Jöbsis shows light emission and light detection optics are suitable means for directing light to a tissue location and means for receiving light from the tissue location.

Regarding claims 16-19, Jöbsis discloses the light emission optics are configured to deliver electromagnetic energy at the claimed wavelengths (figure 6).

### ***Response to Arguments***

6. Regarding the rejection of claims 1-13 under 35 U.S.C. 101 as being directed to non-statutory subject matter, applicant's arguments have been fully considered and are persuasive. The rejection of claims 1-13 under 35 U.S.C. 101 has been withdrawn.

7. Regarding the rejection of claims 1-4, 8-16, and 20-24 under 35 U.S.C. 102(b) as being anticipated by Diab et al. '945 (US Patent 6,501,945), applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

8. Regarding the rejection of claims 1-6, 8, 11-18, and 21-24 under 35 U.S.C. 102(b) as being anticipated by Pologe, applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

9. Regarding the rejection of claims 7 and 19 under 35 U.S.C. 103(a) as being obvious over Pologe in view of Jöbsis, applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Allowable Subject Matter***

10. Claims 5, 6, 7, 12, 13, 22, and 23 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

11. Claim 25 is allowed.

12. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 5, 6, and 7, the prior art does not disclose or suggest the first wavelength is in the range between approximately 1100 and 1400 nm, in the range between approximately 1150 and 1250 nm, or approximately 1185 nm in combination with the other claimed elements.

Regarding claims 12, 13, 22, and 23, the prior art does not disclose or suggest obtaining a third signal which includes a signal portion corresponding with motion-related events and wherein at the third wavelength hemoglobin is a dominant absorber of electromagnetic energy and combining the first and third signal to generate a second combined signal comprising a plethysmograph where a signal portion corresponding with motion-related events that is smaller than that present in the first or third signal in combination with the other claimed elements.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jack Lin whose telephone number is (571) 272-7694. The examiner can normally be reached on Monday-Friday, 8:00 a.m. - 4:30 p.m. EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader can be reached on (571) 272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JL  
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ERIC E WINAKUR  
PRIMARY EXAMINER

